DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003135 Address: 333 Burma Road **Date Inspected:** 20-Jun-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2330 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Chen Xi **CWI Present:** Yes No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 3 – Heavy Machinery Shop

The QA Inspector observed ZPMC qualified welder Dong Yi Qun ID 059450 utilizing WPS-345-FCAW-2G (2F) Repair to perform Flux Core Arc Welding (FCAW) repairs of deck panel Partial Joint Penetration (PJP) welds on DP78-001.

The QA Inspector Dixon was informed by ZPMC QC Inspector Mr. Fu Yuhong that ZPMC CWI Inspector Chen Xi and ABF personnel were about to perform an initial visual repair inspection on deck panel DP078-001 and requested that a Caltrans QA Inspector also be present to perform a visual inspection so that an agreement on the required repairs to the deck panel could be reached by all three parties.

The QA Inspector noticed that the deck panel had already been worked on for weld repairs by welding and grinding at numerous locations, but the grinding technique used to repair the welds appeared to have caused the weld profile to no longer meet the contract requirements.

The QA Inspector observed the ZPMC CWI Inspector and ABF Inspectors perform the visual inspection on the deck panel, and the QA inspector also performed a visual inspection and after all parties agreed on the repairs needed for this deck panel the QA Inspector informed the ZPMC QC Inspector Mr. Lay Tao that the inspection

WELDING INSPECTION REPORT

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performed on the above listed deck panel was not an initial inspection because many of the areas marked for repair were being repaired for the second time due to what appeared to be incorrect grinding technique after the first repair.

Mr. Lay Tao agreed and after he discussed this with the ZPMC CWI a decision was made to call this an R2 repair. The QA Inspector then assigned the Caltrans Lot number B59 on the yellow tag which is pasted on the outside U-rib.

The QA Inspector observed four ZPMC personnel performing grinding of deck panel repairs, one welder performing FCAW welding on deck panel for repair of welds. One ZPMC CWI Inspector was present, one personnel was performing preheat of areas to be welded, and two ABF QA personnel identified as Kevin Chen and Ding Baohua were monitoring the welding.

The deck panel repair welding in the progress generally appeared to conform to contract specifications.

The QA Inspector located and inventoried the following 30 deck panels in New Tower Building Bay #3 on this date: DP055-001, DP067-001, DP003-001, DP042-001 DP038-001, DP077-001, DP054-001, DP038-002, DP065-001, DP015-001, DP074-001, DP025-001, DP0026-001, DP006-001, DP051-001 DP030-002, DP037-001, DP001-001,DP026-002,DP028-002,DP049-001,DP050-001,DP080-001,001,DP075-001,DP027-001,DP070-001, DP072-001,DP031-001,DP068-002,DP030-001,and DP045-001.

Summary of Conversations:

As noted within the report shown above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Dixon,Roscoe	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer